

Notice of Allowability

Application No.

10/768,534

Examiner

Ly D Pham

Applicant(s)

BHAKTA ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10 November 2004.
2. ☒ The allowed claim(s) is/are 1-11, 14-17
3. ☒ The drawings filed on 30 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 091304
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


David Nelms
Supervisory Patent Examiner
Technology Center 2800

DETAILED ACTION

1. Applicant's Terminal Disclaimer filed September 13, 2004 has been approved and entered.
2. Applicant's Information Disclosure Statement, IDS, filed September 13, 2004 has been considered by the examiner.
3. Applicant's Amendment filed November 10, 2004 has been entered. Claims 1 and 14 have been amended. Claims 12 and 13 have been cancelled.

Allowable Subject Matter

4. **Claims 1 – 11 and 14 – 17** are allowed.
5. The following is an examiner's statement of reasons for allowance:

The prior arts teach a memory module comprising:

a generally planar PCB comprising an edge, a common signal trace connector area long the edge, and a first side, the PCB having first lateral portion and a second lateral portion;

a first row of memory ICs identical to one another positioned on the first side of the PCB, and are having a first orientation direction;

a second row of memory ICs identical to one another positioned on the first side of the PCB, the second row of memory ICs are located farther from the common signal trace connector than is the first row, and having a second orientation direction, 180 degrees from the first row, the first and the second rows of ICs are on first and second lateral portions; and

address registers for addressing different memory sections with defined address ranges.

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However, the prior arts did not teach the memory module, further comprising:

a first addressing register and a second addressing register accessing data bits of non-contiguous subsets of a data word;

a first plurality of data lines electrically connecting data pins of the first row of ICs to the common signal trace connector area; and

a second plurality of data lines electrically connecting data pins of the second row of ICs to the common signal trace connector area, whereby lengths of corresponding data lines of the first plurality of data lines and the second plurality of data lines are substantially the same.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


8. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02(b)).

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly D Pham whose telephone number is 571-272-1793. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ly Pham 
November 10, 2004


David Nelms
Supervisory Patent Examiner
Technology Center 2800